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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/801,339

03/15/2004

Akihiko Oda

04173/LH

1940

1933 7590 07/26/2007

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EXAMINER

KIM, JUNG W

ART UNIT

PAPER NUMBER

2132

MAIL DATE

DELIVERY MODE

07/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/801,339	ODA, AKIHIKO	
	Examiner	Art Unit	
	Jung Kim	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>see enclosed</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. Claims 1-20 are pending.

Information Disclosure Statement

2. The IDS submitted on 6/14/04 and 3/27/06 have been considered. An initialed copy is enclosed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 14 recites the limitation "decoding information inputting means for inputting the encryption key data and specific information associated with this." It is not clear with which feature the specific information is associated.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2132

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by

Candelore et al. USPN 7,155,012 (hereinafter Candelore).

8. As per claims 1-6, Candelore discloses a data encrypting device comprising:

- a. encryption key extracting means for extracting a portion of compressed data, acquired by compressing data by a compression processing, as encryption key data; and encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; (col. 3:49-7:36; 8:17-30)
- b. wherein the compression processing is a processing by which if even a portion of compressed data is not correct, the compressed data cannot be expanded (9:52-60; 11:15-50);
- c. wherein the encryption means replaces the portion, extracted as the encryption key data, of the compressed data with data different from the encryption key data; (12:40-42)
- d. wherein the encryption means deletes the portion, extracted as the encryption key data, of the compressed data; (the original portion is removed)

Art Unit: 2132

- e. wherein the encryption means adds other data to the portion, extracted as the encryption key data, of the compressed data; (the replaced portion is the original data scrambled with a scrambling key)
 - f. wherein a predetermined range of the compressed data from the beginning is made the encryption key data. (9:35-45; 10:56-62)
9. As per claim 7, Candelore discloses a data decoding device comprising:
- g. encryption key extracting means for extracting a portion of compressed data acquired by compressing data by a compression processing, as the encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; (col. 3:49-7:36; 8:17-30) and
 - h. compressed data decoding means for decoding the combined data to the compressed data before encryption by combining the encryption key data and the compressed data after encryption, both of which are generated from the same compressed data. (12:3-27)
10. As per claims 8-12, Candelore discloses an image data storing device comprising:
- i. compression means for compressing image data by a compression processing; (col. 3:49-51)

- j. encryption key extracting means for extracting a portion of compressed data acquired by compressing the image data by the compression means, as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; (col. 3:49-7:36; 8:17-30)
- k. encryption key storing means for storing the encryption key data extracted by the encryption key extracting means; encrypted data storing means for storing encrypted data acquired by encrypting the compressed data by the encryption means; (7:29-36)
- l. management information storing means for storing management information showing correspondence between the encryption key data and the encrypted data both of which are acquired from the same compressed data; (7:29-36; 9:15-52)
- m. compressed data decoding means that extracts the encryption key data and the encrypted data, both of which are acquired from the same compressed data, from the encryption key storing means and the encrypted data storing means on the basis of the management information stored in the management information storing means and combines them to decode them to the original compressed data; (12:3-27) and
- n. expansion means for expanding the compressed data decoded by the compressed data decoding means to the image data before compression; (12:22-23)

- o. wherein the encryption means replaces the portion, extracted as the encryption key data, of the compressed data with data different from the encryption key data; (12:40-42)
- p. wherein the encryption means deletes the portion, extracted as the encryption key data, of the compressed data; (the original portion is removed)
- q. wherein the encryption means adds other data to the portion, extracted as the encryption key data, of the compressed data; (the replaced portion is the original data scrambled with a scrambling key)
- r. wherein a predetermined range from the beginning of the compressed data is made the encryption key data. (9:35-45; 10:56-62)

11. As per claims 13-19, Candelore discloses an image data storing device comprising:

- s. compression means for compressing image data by a compression processing; encryption key extracting means for extracting a portion of compressed data acquired by compressing the image data by the compression means, as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; (col. 3:49-7:36; 8:17-30)
- t. encrypted data storing means for storing encrypted data acquired by encrypting the compressed data by the encryption means; (7:29-36) and

- u. decoding information outputting means for outputting the encryption key data extracted by the encryption key extracting means and specific information for specifying the encrypted data corresponding to this encryption key data in association with each other in a predetermined form to an external user; (12:3-27)
- v. decoding information inputting means for inputting the encryption, key data and specific information associated with this; (12:7-10)
- w. compressed data decoding means that extracts the encrypted data corresponding to the specific information input through the decoding information inputting means from the encrypted data storing means and combines the encrypted data with the input encryption key data to decode the combined encrypted data to the compressed data before encryption; (12:3-27) and
- x. expansion means for expanding the compressed data decoded by the compressed data decoding means to the image data before compression; (12:22-23)
- y. wherein the compression processing is a processing by which if even a portion of compressed data is not correct, the compressed data cannot be expanded; (9:52-60; 11:15-50)
- z. wherein the encryption means replaces the portion, extracted as the encryption key data, of the compressed data with data different from the encryption key data; ; (12:40-42)

- aa. wherein the encryption means deletes the portion, extracted as the encryption key data, of the compressed data; (the original portion is removed)
- bb. wherein the encryption means adds other data to the portion of the compressed data extracted as the encryption key data; (the replaced portion is the original data scrambled with a scrambling key)
- cc. wherein a predetermined range from the beginning of the compressed data is made the encryption key data. (9:35-45; 10:56-62)

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Candelore.

14. As per claim 20, Candelore discloses an image forming apparatus comprising:

- dd. compression means for compressing the image data by a compression processing; (col. 3:49-52)
- ee. encryption key extracting means for extracting a portion of compressed data, acquired by compressing the image data by the compression means, as encryption key data; encryption means for encrypting the compressed data by

changing the portion, extracted as the encryption key data, of the compressed data; (col. 3:49-7:36; 8:17-30)

ff. encryption key storing means for storing the encryption key data extracted by the encryption key extracting means; encrypted data storing means for storing encrypted data acquired by encrypting the compressed data by the encryption means; (7:29-36)

gg. management information storing means for storing management information showing correspondence between the encryption key data and the encrypted data both of which are acquired from the same compressed data; (7:29-36; 9:15-52)

hh. compressed data decoding means that extracts the encryption key data and the encrypted data, both of which are acquired from the same compressed data, from the encryption key storing means and the encrypted data storing means on the basis of the management information stored in the management information storing means and combines them to decode them to the original compressed data; (12:3-27)

ii. expansion means for expanding the compressed data decoded by the compressed data decoding means to the image data before compression. (12:22-23)

15. Candelore does not expressly disclose reading means for reading an original document to capture image data corresponding thereto; and printing means for forming and outputting an image corresponding to the expanded image data on recording paper.

Art Unit: 2132

However, it is notoriously well known in the art for image data transmitted by a supplier to be supplied from an original digital document; most transmissions to a set-top box are not televised "live" and are recorded prior to the transmission. Moreover, a user recording means included recording paper is a notoriously well known tactic by a user to preserve content received from a supplier. Digital capture including video tape means or electronic printing paper enable the user to playback or reproduce images and sounds from an initial transmission. Once a transmission is decrypted, capture and restoration of the decrypted image is a trivial matter in the art. Examiner takes Official Notice of these teachings. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made for the supplier to include reading means for reading an original document to capture image data corresponding thereto; and the user to include printing means for forming and outputting an image corresponding to the expanded image data on recording paper. One would be motivated to do so to reproduce digital content as known to one of ordinary skill in the art. The aforementioned cover the limitations of claim 20.

Communications Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W. Kim whose telephone number is 571-272-3804. The examiner can normally be reached on M-F 9:00-5:00.

Art Unit: 2132

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jung Kim
Examiner
July 19, 2007